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Modified Oil Soybean Test—North

Abstract

The purpose of this test was to evaluate the experimental modified oil soybean lines adapted to northern Iowa. The 2009 Modified Oil Soybean Test included 1% linolenic and low saturates, and for comparison of agronomic traits, commercially grown varieties released by Iowa State University. Oil from 1% linolenic and low saturates soybean varieties grown in Iowa is used in the frying oil market. This oil is healthier for the consumer.

Keywords

RRFR A9098, Agronomy

Disciplines

Agricultural Science | Agriculture | Agronomy and Crop Sciences

Modified Oil Soybean Test—North

RFR-A9098

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Introduction

The purpose of this test was to evaluate the experimental modified oil soybean lines adapted to northern Iowa. The 2009 Modified Oil Soybean Test included 1% linolenic and low saturates, and for comparison of agronomic traits, commercially grown varieties released by Iowa State University. Oil from 1% linolenic and low saturates soybean varieties grown in Iowa is used in the frying oil market. This oil is healthier for the consumer.

Methods

The modified oil soybean test for the northern district was planted at four Iowa locations—Ames, Charles City, Kanawha, and Wallingford. At each location, three replications of four-row plots were planted. The plots were 13 ft long with row spacing of 27 in. The seeding rate was nine seeds/ft. Agronomic characteristics evaluated at Kanawha included plant height and lodging susceptibility. The center two rows were harvested using a self-propelled research plot combine. The moisture and weight of each plot were measured on the combine during harvest. The harvested seed was brought to Ames for seed weight calculation, oil and protein analysis, and fatty acid analysis.

Results

The test results of the commodity varieties IA1022 and IA2094, the 1% linolenic varieties, the low saturates varieties and experimental lines A07-421002, A07-421013, and A07-521023, are summarized in Table 1. The data obtained from the test helped determine that A07-421002 (now IA1025), A07-421013, and A07-521023 (now IA2099) should be released to interested growers.

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